

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (*Currently Amended*) A transmitting facility for a multipoint-to-point synchronous CDMA network, comprising:

a unit for generating a CDMA-encoded ~~CDMA-coded~~ information signal, ~~said facility~~
~~further comprising~~

a unit for generating an acquisition signal and encoding ~~the said~~ acquisition signal with
an acquisition code having a substantially shorter length than ~~which is different from said~~
~~acquisition signal and which is not~~ a CDMA communication code used for encoding information
signals, wherein the signal level of the acquisition signal is being ~~being~~ telemetrically adjustable, and

a transmitter for transmitting, at least during an initial synchronization time, the
information signal and the acquisition signal simultaneously in the same transmission channel ~~as~~
~~the information signal.~~

2. (*Currently Amended*) A receiving facility for a multipoint-to-point synchronous CDMA network, comprising:

a unit for receiving and detecting a CDMA-encoded ~~CDMA-coded~~ information signal and a unit for receiving and detecting an acquisition signal, wherein ~~the said~~ unit for receiving and detecting an acquisition signal comprises a detector for detecting ~~the said~~ acquisition signal ~~signals~~ with an acquisition code having a substantially shorter length than which is different from said acquisition signal and which is not a CDMA communication code used for encoding information signals, and

a logical correlator for correlating at least two serially transmitted, identical acquisition signals, and

an accumulator for accumulating the correlated acquisition signals~~[[,]]~~ to detect by means of which the detection of the acquisition signal can be carried out, wherein, at least during an initial synchronization time, the acquisition signal and the information signal are simultaneously being transmitted in the same transmission channel as the information signal.

3. (*Currently Amended*) An acquisition method for a multipoint-to-point synchronous CDMA network comprising at least two terminals and a center, the terminals transmitting ~~CDMA-encoded~~ ~~CDMA-coded~~ information signals and acquisition signals to the center, wherein in order to achieve synchronization, each of the terminals ~~transmitting~~ serially transmits to the center at least two identical acquisition signals whose levels are telemetrically adjustable by the center and which are transmitted simultaneously with their respective information signals at least during an initial synchronization time in the same transmission channel ~~as the information signal~~, and said center detecting the acquisition signal with an acquisition code having a substantially shorter length than ~~which is not~~ a CDMA communication code used for encoding information signals, logically correlating the detected acquisition signals and subsequently accumulating the correlated acquisition signals.

4. (*Currently Amended*) The A-transmitting facility as claimed in claim 1, wherein ~~characterized in that~~ the acquisition code is a Barker code.

5. (*Currently Amended*) The A-receiving facility as claimed in claim 2, wherein ~~characterized in that~~ at least two logical correlators and at least two accumulators are provided for detecting at least two acquisition signals with different time relations to the information ~~CDMA~~ signals and/or for allowing the use of two or more acquisition codes.

6. (*Currently Amended*) The A-receiving facility as claimed in claim 2, wherein
~~characterized in that~~ at least one matched filter serves to implement one or more correlators.

7. (*Currently Amended*) The A-transmitting facility as claimed in claim 1, wherein
~~characterized in that~~ the length of the acquisition code is shorter than the length of the CDMA
communication code by at least a factor of five.

8. (*Currently Amended*) The A-receiving facility as claimed in claim 2, wherein,
~~characterized in that~~ prior to or after the accumulation, squaring is performed.

9. (*Currently Amended*) The A-method as claimed in claim 3, wherein the method further
comprises:comprising the steps of
estimating the number of colliding terminals, and
using a plurality of different contention-resolving techniques.

10. (*Currently Amended*) The A-method as claimed in claim 3, wherein ~~characterized in~~
~~that the center is adapted to telemetrically~~ specifies ~~specify~~ the transmitted power of the
acquisition signals of the terminals so in such a way that the sum level of all simultaneously
transmitted acquisition signals is at least 10 dB lower than the sum level of all simultaneously
transmitted information signals.

11. (*Currently Amended*) The A-receiving facility as claimed in claim 2, wherein
~~characterized in that~~ the acquisition code is a Barker code.

12. (*Currently Amended*) The A-method as claimed in claim 3, wherein ~~characterized in~~
~~that~~ the acquisition code is a Barker code.

13. (*Currently Amended*) The A-receiving facility as claimed in claim 5, wherein
~~characterized in that~~ at least one matched filter serves to implement one or more correlators.

14. (*Currently Amended*) The A-receiving facility as claimed in claim 2, wherein
~~characterized in that~~ the length of the acquisition code is shorter than the length of the CDMA
communication code by at least a factor of five.

15. (*Currently Amended*) The A-method as claimed in claim 3, wherein ~~characterized in~~
~~that~~ the length of the acquisition code is shorter than the length of the CDMA communication
code by at least a factor of five.

16. (*Currently Amended*) The A-method as claimed in claim 3, wherein, ~~characterized in~~
~~that~~ prior to or after the accumulation, squaring is performed.

17. (*Currently Amended*) A receiving facility for a multipoint-to-point synchronous CDMA network, comprising:

a unit for receiving and detecting a CDMA-encoded ~~CDMA-coded~~ information signal and a unit for receiving and detecting an acquisition signal, wherein ~~the said~~ unit for receiving and detecting an acquisition signal comprises a detector for detecting ~~the said~~ acquisition signal with an acquisition code having a substantially shorter length than which is different from said acquisition signal and which is not a CDMA communication code used to encode information signals,

a logical correlator for correlating at least two serially transmitted, identical acquisition signals, and

an accumulator for accumulating the correlated acquisition signals~~[[,]]~~ to detect by means of which the detection of the acquisition signal can be carried out, wherein, at least during an initial synchronization time, the acquisition signal and the information signal are simultaneously being transmitted in the same transmission channel as the information signal, and the signal level of the acquisition signal is being telemetrically adjustable.

18. (*New*) The receiving facility as claimed in claim 17, wherein the acquisition code is a Barker code.

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19. (*New*) The receiving facility as claimed in claim 17, wherein at least two logical correlators and at least two accumulators are provided for detecting at least two acquisition signals with different time relations to the information signals and/or for allowing the use of two or more acquisition codes.

20. (*New*) The receiving facility as claimed in claim 17, wherein the length of the acquisition code is shorter than the length of the CDMA communication code by at least a factor of five.